UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/944,212	08/31/2001	Thomas M. Kurth	URE02 P-309	2406

277 7590 01/07/2008

PRICE HENEVELD COOPER DEWITT & LITTON, LLP
695 KENMOOR, S.E.
P O BOX 2567
GRAND RAPIDS, MI 49501

EXAMINER	
COONEY, JOHN M	

ART UNIT	PAPER NUMBER
1796	

MAIL DATE	DELIVERY MODE
01/07/2008	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	09/944,212	KURTH ET AL.	
	Examiner	Art Unit	
	John Cooney	1796	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *31 October 2007*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *83-108* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *83-108* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 10-31-07 has been entered.

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

> The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 83-108 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Applicants' recitation of (1.) ranges of amounts of blown vegetable oils used and (2.) ranges of amount values for the respective A- and B-side component parts as set forth in the claims are not supported by the originally filed supporting disclosure in a manner that it is evident that applicants' invention was described in the specification in such a way as to reasonably convey to

one skilled in the relevant art that the inventors, at the time the application was filed, had possession of the claimed invention. This is a new matter invention.

Applicants' supporting disclosure lacks showing of support for possession of ranges of amount values for these respective claim components as now defined by the claims.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 83-108 are rejected under 35 U.S.C. 103(a) as being unpatentable over Croft (5,688,860) in view of GRANT et al.(Chemical Dictionary).

Croft discloses polymer materials comprising the reaction product of isocyanates, isocyanate reactive materials, catalysts, plasticizers, extenders/crosslinkers, and other materials of applicants' claims (see column 3 line 53 et seq. & column 10 line 60 – column 12 line 40, as well as, the entire document). Croft's disclosure sets forth materials and reactants as well as intermediates employed in the making of its products such that it is seen that esterification to the degree defined by the claims is met by Croft's disclosure, and this recitation in the claims does not distinguish the claims over

the teachings of Croft. Difference based on the ranges of A-side to B-side ratios {isocyanate Index values} is not seen.

Croft differs from applicants' claims in that its oils and derivatives are not blown. However, GRANT et al. (see page 89) discloses blowing oils to be a well known treatment of oils for purposes of providing well studied oxidization effects to the oils which are blown. Based on the disclosure of GRANT et al. and applicants' own admissions, it is held that it would have been obvious for one having ordinary skill in the art to have blown the vegetable oils of Croft in the manner disclosed by GRANT et al. for the purpose of obtaining oxidized oils and effecting control of the reactivities of the oils involved in order to arrive at the products of applicants' claims with the expectation of success in the absence of a showing of new or unexpected results.

Croft differs from applicants' claims in that overlap in the ranges of values for the respective oil component is not exact. However, Croft discloses employment of this component in amounts of up to 60 percent of the entire product which is in overlap with the ranges of values of applicants' claims that are based on the mixture from the B-side component. Accordingly, it would have been obvious for one having ordinary skill in the art to have controlled the amounts of the oil component of Croft within the teachings of Croft for the purpose of controlling its reactive and property impacting effect in order to arrive at the products of applicants' claims with the expectation of success in the absence of a showing of new or unexpected results. Additionally, it has long been held that where the general conditions of the claims are disclosed in the prior art, discovering the optimal or workable ranges involves only routine skill in the art. *In re Aller,* 105

USPQ 233; *In re Reese* 129 USPQ 402. Similarly, it has been held that discovering the optimum value of a result effective variable involves only routine skill in the art. *In re Boesch,* 617 F.2d 272,205 USPQ 215 (CCPA 1980).

The following previously set forth arguments are held to apply to this new grounds of rejection over applicants' newly set forth claims:

When reviewing results, the following must be considered:
Result Must Compare to Closest Prior Art:
Where a definite comparative standard may be used, the comparison must relate to the prior art embodiment relied upon and not other prior art – *Blanchard v. Ooms,* 68 USPQ 314 – and must be with a disclosure identical (not similar) with that of said embodiment: *In re Tatincloux,* 108 USPQ 125.

Results Must be Unexpected:
Unexpected properties must be more significant than expected properties to rebut a prima facie case of obviousness. *In re Nolan* 193 USPQ 641 CCPA 1977.
Obviousness does not require absolute predictability. *In re Miegel* 159 USPQ 716.
Since unexpected results are by definition unpredictable, evidence presented in comparative showings must be clear and convincing. *In re Lohr* 137 USPQ 548.
In determining patentability, the weight of the actual evidence of unobviousness presented must be balanced against the weight of obviousness of record. *In re Chupp,* 2 USPQ 2d 1437; *In re Murch* 175 USPQ 89; *In re Beattie, 24* USPQ 2d 1040.
Claims Must be Commensurate With Showings:
Evidence of superiority must pertain to the full extent of the subject matter being claimed. *In re Ackerman,* 170 USPQ 340; *In re Chupp,* 2 USPQ 2d 1437; *In re Murch* 175 USPQ 89; *Ex Parte A,* 17 USPQ 2d 1719; accordingly, it has been held that to overcome a reasonable case of prima facie obviousness a given claim must be commensurate in scope with any showing of unexpected results. *In re Greenfield,* 197 USPQ 227. Further, a limited showing of criticality is insufficient to support a broadly claimed range. *In re Lemin,* 161 USPQ 288. See also *In re Kulling,* 14 USPQ 2d 1056.

Applicants' have not persuasively demonstrated unexpected results for the combinations of their claims. Evidence must be attributed to the employment of blown oils rather than non-blown oils. Comparisons must be made with the prior art

embodiment relied upon. Applicants must demonstrate their results to be clearly and convincingly unexpected and more than mere optimizations of the knowledge in the art or more significant than being secondary in nature. Blowing/oxidation of vegetable oils has the expected effect of brings about changes in –OH functionality, and, accordingly, effects on reactivities of the resultant materials, and there are numerous expected effects associated with these changes. These effects include changes in crosslinking density and altered reactivities. Accordingly, burden is upon applicants' to demonstrate that any showing of results is, in fact, new or unexpected. Additionally, applicants' showings must be commensurate in scope with the scope of the claims as they currently stand.

Although oils of Croft may be employed as plasticizers, such does not negate any implicit reactivity these materials may have. Nor does such negate the expected impact of reactivities that blowing would have on these oils. Showing reduced hydroxyl functionality in castor oil as opposed to the oils of applicants' claims does not substitute for a clear and convincing showing of new or unexpected results attributable to the employment of the modified oils of applicants' claims that is commensurate in scope with the scope of the claims.

As to applicants' arguments pertaining to Croft's disclosure of the functional materials of the claims, it is maintained that Croft provides encompassing disclosure of the functional materials of applicants' claims and provides for esterified polyols being formed to the degree required by the claims (see again column 7 lines 47- column 11 lines 65, as well as, the entire document).

Applicants' arguments on response have been considered. However, distinction in the claims sufficient to overcome the rejection as set forth above have not made evident, and showings of results sufficient to overcome the rejection have not been provided in applicants' reply.

Double Patenting

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct

from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 83-108 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 1 of copending Application No. 11/933,049. Although the conflicting claims are not identical, they are not patentably distinct from each other because the claims of the applications set forth materials encompassing products based on isocyanate, catalysts, blowing agents, crosslinkers, blown vegetable oils, and other elements combined in such a manner and in effective amounts such that differences in their material make-ups as to the products realized would have been obvious to an ordinary practitioner with the expectation of success in the absence of a showing of new or unexpected results attributable to the formulational make-ups supported by claim limitations

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to John Cooney whose telephone number is 571-272-1070. The examiner can normally be reached on M-F from 9 to 6.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James Seidleck, can be reached on 571-272-1078. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

JOHN M. COONEY, JR.
PRIMARY EXAMINER
Group 1700